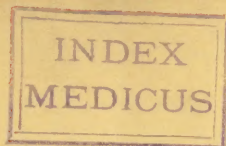


Potter (W.W.)



HOW SHOULD GIRLS BE EDUCATED?

A PUBLIC HEALTH PROBLEM FOR MOTHERS,
EDUCATORS, AND PHYSICIANS.

BY

WILLIAM WARREN POTTER, M.D.,
OF BUFFALO.

THE ANNIVERSARY ADDRESS OF THE PRESIDENT
DELIVERED AT THE EIGHTY-FIFTH ANNUAL MEETING OF THE
MEDICAL SOCIETY OF THE STATE OF NEW YORK.



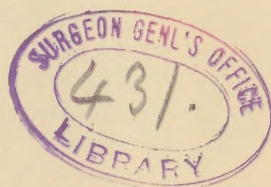
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MEDICAL SOCIETY OF THE STATE OF NEW YORK,
ALBANY, February 5, 1891.

Extract from the Minutes.

Resolved: That the Secretary be and is hereby authorized and instructed to have printed one thousand copies of the President's Anniversary Address in pamphlet form, and that they be distributed to members of the County Societies, Superintendents of Public Schools, and such other persons as he may deem advisable.

Passed unanimously.

F. C. CURTIS,
Secretary.

HOW SHOULD GIRLS BE EDUCATED?

A PUBLIC HEALTH PROBLEM FOR MOTHERS, EDUCATORS, AND
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BY WILLIAM WARREN POTTER, M.D.,
BUFFALO.

IN the preparation of a dissertation for this occasion, as required by the by-laws, not the least difficult part of the labor proved to be the selection of a subject. In this I presume my experience has not been different from that of the average of mankind, who were similarly conditioned as to a duty to be performed, with a consciousness of unfitness for the task.

Recognizing the fact, however, that these anniversary occasions usually group audiences not entirely composed of physicians, it is presumed that a discourse upon some subject not technically medical in its character would be more likely, than a strictly professional theme, to command attention. I crave your indulgence in an attempt to discuss one that at least has the merit of importance, whatever it may lack in the methods of its presentation.

All problems relating to the prevention of disease are now being recognized, even among the non-medical portion of the community, as of greater importance than those pertaining to cure. The elimination of any factors from our social and educational status that tend to produce or increase those diseases to which women are peculiarly liable, has always an abiding interest for physicians, and any methods which may be proposed for the accomplishment of this end, must ever afford absorbing topics for discussion, whenever they are assembled for the purpose of considering questions which refer to the welfare of the community, having regard for the health,

¹ The President's Anniversary Address, delivered in the Assembly Chamber at Albany, February 4, 1891, during the eighty-fifth annual meeting of the Medical Society of the State of New York.

the longevity, and the preservation of the physical and mental vigor of its citizens. But if we expect to succeed in improving the educational and social environment of girls to the end that we may render them mentally and physically stronger, we must obtain the coöperation of educators, public-spirited citizens, and especially the mothers of the land.

To all these, then, I appeal, with whatever cogency there is in speech, to unite with us might and main, with purse and influence, with precept and example, in a determined effort to establish society and education upon a healthier basis. It is only by agitation and frequent discussion of the subject that a healthy public sentiment can be created in regard to the errors in the present educational methods, which may ultimately lead to their correction; and I hope, therefore, that I may be able to convince at least some of my auditors that it is their duty, on all suitable occasions, either in public assemblage or in private conversation, to lift up their voices and to speak with no uncertain sound, to the end that the girls and young women of our land may be released from a system that is pernicious in the extreme in its effects upon their future health and happiness.

It must not be forgotten that we are living in an age of advancing intelligence, in which the size of the brain, even in the fetus, has increased; while, on the other hand, the muscular system of woman, and, consequently, her reproductive organs, have become weaker than formerly. To begin with, then, if we would have a healthy race we must have healthy mothers, and if we would have healthy mothers we must seek to lay the foundation for their healthfulness during the period of growth and development—that is, during their first twenty years of life.

A large portion of this time is allotted to what we term the education of our girls, or their intellectual development. A girl is sent to school at five or six, and there remains during nine months of the year, until she reaches the age of seventeen or eighteen years. But the period from ten to sixteen is the special point of time to which I would direct attention, as being the years during which much harm is done to the average American girl by the faulty methods in vogue. By the time she arrives at the age of ten, her mental capacity has reached a point where it begins to receive impressions of a lasting character, and her ambition is now such as to lead her beyond her powers of endurance, if not directed by a careful judgment. Up to this time she has travelled the same pathway as the boy of her age;

but now, speaking with reference to her school training, these lines must begin to diverge a little.

The thoughtful mother will recognize that her little daughter will soon reach the age of sexual development in which the periodicity of her being will assert itself in the physiological phenomenon of menstruation, hence she will prepare the way for this change by fortifying all the avenues that tend to promote a good physique. She will attend to nutrition, to physical and mental rest at appropriate intervals, to personal hygiene, and to restraining the emotions; in short, to everything that will store up nerve force and conserve physical strength. Did I say the thoughtful mother will do all this? How many mothers begin thus early to supervise the methods and habits of life of their daughters, with a view of preparing them properly to undergo the great transmutation that awaits them at puberty?

The years between ten and fourteen are full of import to a girl; during them she lays the foundation for future weal or woe, and I hesitate not to declare that this is a period of infinite responsibility for mothers—perhaps the greatest of any part of the educational life of their girls. And be it understood that I habitually refer to education in its broadest sense, and not to mere scholastic acquirements. Many girls begin their new physiological life at the age of twelve, but if they should not do so quite as early, this is still a period when Nature is making preparations for a new existence for the young female, and if her plans are interfered with or thwarted even in their smallest details, years—long sorrowing years, perhaps, of pain, and suffering, and woe—are sacrificed to the shrine of ignorance or wilful neglect. This should be a period of stern tutelage for the young maiden—not in the sense of harshness, but in the fulness of kind-heartedness. Her food should be wholesome and partaken of with regularity, and she should be particularly trained to the habit of eating a hearty breakfast; she should have fresh air and plenty of it; her hours for sleep should be regular and prolonged; her dress should be plain and strong, that she may not fear to be caught in a shower or climb a fence lest it be soiled or crumpled; and particular attention should be paid to her shoes, the soles of which should be broad enough to rest the entire width of the foot upon, sufficiently thick to furnish good support and not wet easily, the uppers soft and pliant but not too thin, and the heels neither high nor low but of medium height, width, and thickness. I lay great stress upon

the construction of the shoe. It should not be coarse and heavy, as then it will be a constant source of mental irritation to the wearer; for girls, even at this age, are beginning to take pride in a comely foot, and it is a pride to be fostered with a kindly care. The foot, with a little forethought, can be properly attired, and at the same time be both healthfully and neatly dressed. I take this opportunity to say a word in condemnation of that modern abomination to womanly grace and comfort, the French heel. These heels displace the supporting base of the body by forcing upward the keystone of the arch on which it rests, thereby weakening the whole superstructure. Their injurious effects are by no means confined to the feet, but their baneful influences pervade the whole economy. Time will not permit me to elaborate the subject now, but I may refer to a paper published a few years ago by Dr. Samuel C. Busey, of Washington, in which he says: "The vascular, postural, and nutritive disturbances growing out of the deflection of the skeleton, which I have attempted to show may find their starting-point in too great elevation of the heel, are not necessarily confined to the bladder, uterus, and rectum. All the tissues and organs, the vagina, ovaries, Fallopian tubes, ligaments, and fasciæ, may become involved. Hyperemic conditions, distortions, and displacements, either singly or collectively, may follow in an extended sequence of local and general disorders, but menstrual disturbances and vaginal discharges are probably more common."

At the period under consideration regular sleep should be invoked, for that

"Balm of hurt minds, great Nature's second course,"

is absolutely indispensable to the growing maiden; the skin should be kept in a healthful state through frequent and proper baths; the evacuations of the body should be carefully and regularly promoted, and a thorough personal hygiene maintained. Everything that tends to mental cheerfulness, with a reasonable allowance of gaiety and mirth, should be permitted; while grief, anger, and sadness should be restrained or prevented if possible. As the first catamenial epoch approaches the young girl will experience certain preliminary sensations, new and strange to her, yet plainly indicating that she is at the threshold of a new existence which has been wisely created for her by beneficent Nature. Now she will need, more than ever, the timely and kindly counsel and care of her mother, who should simply and plainly explain to her the significance of her feelings, and the

event which they foreshadow. Her school work should now be lightened a little, no matter how easily she may seem to carry it on, and some diversion should be planned for her a little out of the ordinary daily routine of life. With the appearance of the first flow absolute mental and physical rest should be enjoined, to the extent of relinquishing all study or fatiguing exercise until the menstrual phenomena cease, and light reading of an attractive and entertaining character, together with passive occupation, may be allowed to take their place. This implies that the girl is not to attend school, nor otherwise to engage in her school work during the few days of the menses. I would make this an absolute rule during the first periods, or until the function becomes normally established. Afterward, with some girls, one or two days' absence from school during the catamenial period may be sufficient, but, in any event, the amount of school work exacted at that time should be very much less than during other portions of the month; and this rule should be continued forever and aye, during their whole school life.

And this brings us *vis à vis* to the consideration of the present school curriculum, and a critique of the system as it applies to girls. During their years from eight to sixteen or seventeen, girls pass most of their time in the over-crowded and badly-ventilated school buildings which are provided by our "splendid common school system"; or they are poring over their books at home, cramming their young brains with problems of algebra or geometry, when they might better be cultivating a healthy physique, to enable them to cope with the requirements of every-day life. Or else, if they are in attendance upon one of the fashionable boarding schools or colleges for young women, we find them from early morning until late evening making systematic endeavor to ascertain just how much overwork of mind and body the human female of tender years can endure, without breaking down under the mental and physical strain to which she is being subjected. I will not name any particular school or college, for I wish to criticise without seeming to be personal, but if anyone will take the trouble to investigate the matter it will result, perhaps, in amazement at the amount of work which is daily exacted of pupils in attendance upon any of our so-called female colleges. This is about the average picture:

6.30 o'clock A.M., rising.

7 o'clock A.M., breakfast.

7.30 to 8.45 A.M., Scriptures, chapel, prayers, etc.

9 A.M. to 12 M., studies and recitations.

12 M. to 1 P.M., dinner and exercise.

1 to 5 P.M., studies, recitations, gymnastics, and music.

5 to 6 P.M., relaxation or study.

6 P.M., tea.

6.30 to 8 P.M., studies.

8 to 9 P.M., preparation of lessons for next day.

9.30 P.M., Bible reading and to bed.

Thus we find ten hours given to mental occupation, or some form of educational duties, eight to sleep, and the remainder of the twenty-four is divided between dressing, meals, exercise, and the preparation of essays or other requirements of the curriculum. Then there are literary societies with their various requirements that must be attended, which absorb much of the time that otherwise could be devoted to recreation. Then, again, the buildings are quite generally large and several stories in height, so that, in the course of the day, there is considerable expenditure of physical energy in going up and down stairs—a factor of no mean import in the production of diseases of the pelvic organs. I have in my mind just now a large and beautiful school building in a populous city, in which the administration department is located on the first floor, the boys' school on the second, while the girls are compelled to ascend to the third story for their instruction. This plan seems to have been adopted with special reference to the destruction of the health of the girl pupils, and I doubt not it is fulfilling its apparent object with great exactitude. In our common schools the system is even more dangerous in its demands upon the stamina of girls than in the private schools and colleges. A common standard is insisted upon for each grade, and the girl must work to the line with the same precision as the sturdy boy, or miss the chance of promotion to the next grade; or, perhaps, fail in the regents' examination, than which nothing can be more unsatisfactory as a test of educational merit or qualification.

The scholastic training of girls is being carried on with its greatest vigor at the very time when they are physically least suited to bear the strain. Just when the ovary is beginning to require a large expenditure of nerve force, the brain under our present system is also demanding all that an active cerebration can produce, and oftentimes even more. Now, our girls must be taught mathematics, the classics, English literature and composition, rhetoric, logic, belles-

lettres, modern languages, music, drawing, painting, astronomy, geology, botany, zoölogy, and Butler's *Evidences of Christianity*. All this, and much more, must be crowded into the years between thirteen and seventeen. Nature is demanding during this very period that the ovaries shall establish a function which shall properly fit the young maiden for her future sphere of wife and mother, that she may joyously and healthfully obey the mandate to "multiply and replenish the earth." How, let me ask, can she fulfil this important law of her being in any proper sense, if her reproductive organs are dwarfed, deformed, weakened, and diseased, by artificial causes imposed upon her during their development? It is as certain as any physiological law, that the brain and ovary cannot both be developed at one and the same time, unless the proper equilibrium of nerve force is maintained, without the one or the other giving way; and the ovary generally suffers first, because it is more sensitive during the establishment of its functions. It receives impressions through two avenues, the cerebro-spinal and the sympathetic or ganglionic systems. These nicely attuned rhythmic relations cannot always resist, for a great length of time, such an undue strain as our educational system makes upon them, without crying out against the outrage, or yielding perforce, without a struggle in many instances.

Mothers should be made to understand when their daughters begin to complain of headache, backache, and an indescribable malaise, that these are warnings which must be heeded. They are the manifestations of nerve-tire, the crying out of the nerve-ends for rest, the protest of nature against further continuance of overwork—danger-signals hoisted to warn of the relentless ravages of the approaching tornado. And, further, that unless they receive a patient hearing and an intelligent interpretation during their earlier exhibitions they will assuredly lead to serious impairment of physical and mental vigor.

The result of this over-taxation at school is, I have said, very liable to react disastrously upon the pelvic organs of the young girl. Bear with me a moment in tracing the practical working of this neglect in an imaginary case that I shall take care is not exaggerated beyond a point which I have again and again observed. A physician was consulted in regard to the ill-health of a young girl by her mother, who related her condition as follows: Age sixteen, and of medium height and weight; was born of healthy parents, and had always been well until about a year ago. Her first

symptoms were backache, headache, and loss of appetite; constipation resulted later, with flatulence, acid eructations, and foulness of breath. The catamenia appeared at fourteen and went on with regularity for nearly a year; then began pain a little prior to the flow, which had increased with each succeeding epoch, until now she was obliged to take her bed and resort to active measures to obtain relief. The flow had also become scanty and was associated with leucorrhœa of an ever-increasing quantity, while the bladder had likewise become irritable. There was a sense of weariness consequent upon the slightest mental effort, that finally compelled the abandonment of all attempts at study. Noisy insects, like locusts, fretted her in the extreme, while insomnia of the most distressing obstinacy was a nightly horror. The hue of robust health had disappeared, and in its place had come the flush of invalidism upon the least excitement, or the paleness of anemia in repose. Her hands and feet were cold, and fugitive neuralgic pains were ever constant. The school history of this young girl was briefly told. She had taken the usual course of brain-cramming, until her over-tasked and over-taxed mind had become bewildered in its efforts to maintain the struggle, while her weakened and enfeebled body had utterly refused to carry the burden farther. She was in ruddy, robust health at fourteen; an invalid at sixteen, thanks to the folly of an ambitious though kind-hearted mother, who never saw the evils that the early symptoms foreboded. She confessed that she never supervised the menstrual week of her daughter, nor cautioned her in any way as to the abridgment of mental or physical exertion during its progress. Now that the mischief was done, she sought the consulting-room full of a self-reproach that verged on the agony of despair.

In another case, older than this, was found less mental disturbance, but more sexual disorder. The ovaries were tender and swollen, the womb engorged and indurated, and there was uterine hyperplasia and pelvic blood-stasis. The linen was stained with leucorrhœa of a uterine origin, which irritated the vaginal mucous membrane in a marked degree. On occasions she was hysterical, moody, or irascible, and at other times cheerful, amiable, witty, and entertaining. Forgetful of her misery under the influences of excitement she would rise from a bed of torture and join in social gaiety, dancing, and mirth. The consequence was she did not command the sympathy her real condition merited. It is too often the case

that those in daily contact with such a patient do not comprehend that her remote sympathetic disturbances may exist as a terrible reality, even when her physical appearance does not indicate disease. The error is a serious one, for the want of consideration and sympathy on the part of friends or relatives often serves to depress and obtund the already impaired mental and moral faculties, which, reacting upon the disease itself, helps to aggravate all its symptoms.

The sexual system is the pivotal part of woman's organism; when it becomes disordered or diseased the whole economy is upset in its functions to a greater or less extent—its pernicious effects pervade the very warp and woof of her being. The reproductive organs are in intimate relation with all the other organs through the ganglionic system, and with the brain through the cerebro-spinal system as well. At puberty, and for some time before as well as afterward, the nervous system is the dominant element in the female economy, and these two systems, the sexual and nervous, act and react upon each other with a complexity which, though interesting to study, is difficult to comprehend. Now, suppose the nervous supply to the sexual system is received from an over-taxed and badly-nourished brain, what may be naturally expected to happen? Surely, it is but reasonable to anticipate disturbance of the functions of the latter, proportionate to the fatigue and innutrition of the former. The nerve-ends become irritated and cause aches and pains in the organs to which they are distributed. The circulation is under control of the nervous system; disturbed innervation of the bloodvessels leads to vascularity; irritation causes hypervascularity, and, as a consequence, we have increased arterial pressure—the flux begins; the arterioles dilate—tone is lost; the equilibrium between the venous and arterial systems is no longer maintained—there is venous engorgement; and, finally, blood-stasis. From blood-stasis to congestion is but a step; then follow dysmenorrhœa, hypersecretion, endometritis; for anything that produces stasis of blood may also cause endometritis—the arteries carrying more blood to the pelvic organs than can be returned by the veins—with the sequent catarrh; all these conditions, I affirm, may be resultant from the nerve turmoil which begins in the overworked, weary, and anemic cerebrum.

It is not my purpose to carry on this desultory and necessarily imperfect pathological sketch much farther, enough having already been said for the purposes in view—viz., to show that the essence of the disease in these cases lies not in the reproductive organs in the

beginning, but in the nerve centres, whence, by the predomination of the sexual sphere at this age, the local expression of the fault is referred to the sexual system; but I may pause to remark in this connection, that just here begin the causes, oftentimes, which in after life produce the sterile wife or invalid mother. I have no doubt that, in many instances, these deplorable conditions take origin in the over-education or improper education of girls during the tender years of their development into young womanhood; and that the pangs of maternity are thereby increased far beyond the limitations of the mandate of Deity in the decree to woman, "In sorrow and suffering shalt thou bring forth children."

Here begin those pathological changes in the genital tract that result in lacerations of the cervix, rents of the perineum, and other lesions of parturition. The roll of maladies arising from jaded nerves which affect the reproductive apparatus of woman is a long one, but it need not be listed here. Surely, were the elder Hodge alive he might with propriety re-exclaim, "The womb is subject to so many ills, what a pity 'tis a woman has a womb!" but he would find some justification in also adding "and ovaries."

The relation of the ovaries to the brain and nervous system is an intimate one. The full discussion of the subject involves physiological studies that are not germane to the purposes of the evening. Nevertheless, it is proper to keep in mind that the sexual organs are dependent upon the general nutritive system for organic support; that they stimulate, depress, or otherwise modify nutrition chiefly through the ganglionic nerves, and that the portion of the brain which presides over the organic functions also dominates the reproductive organs.

Let it likewise be remembered, that the emotions are in part dependent upon the sexual organs for their proper development, and that the sexual system is in turn largely affected by the emotions. This is so near a truism that no one will attempt to controvert it. It is also a well-understood fact that the emotions, such as anger, fear, and even excessive joy, are capable of modifying and even arresting, temporarily at least, the menstrual function. In view of this great potentiality of the ovaries (I quote in substance though somewhat at random the next few sentences from Skene's masterly essay, to which reference is made at the end) in developing certain capabilities of the brain and nervous system and in influencing their functions, it is evident that, in order to maintain harmonious

action of the whole organism, it is necessary that the ovaries shall exist in full development and functional activity. Moreover, these organs, which are so essential to the good health of woman, when diseased exercise a potent influence in deranging the brain and nervous system. Imperfect development of the ovaries not only modifies the physical peculiarities of woman, but also retards the development of the higher nerve-centres.

All of this goes to show the mutual dependence and independence of the brain or nerve-centres, and the sexual system. Neither can be deranged or morbidly disturbed for any considerable length of time without seriously affecting the other. This subtle interplay of cause and effect may be difficult to differentiate; nevertheless, it is easy to understand how a worn, and weary, and anemic brain may serve as an etiological base from which may spring manifold disturbances of organ and function in the reproductive system. Now, it is amenorrhœa or scanty menstruation, with neuralgic and hysterical pains, due to anemia of the sexual organs; and again, it is dysmenorrhœa, menorrhagia, and leucorrhœa, due to hyperemia of the same; or still again, it is manifested in uterine flexions and dislocations; in ovarian displacements, congestions, or perturbations, and in a variety of other phenomena, subjective and objective, with which every physician is more or less familiar.

It is, I am persuaded, too common an error to regard the sexual fault as a prime factor in the causation of all the mischief, and to address energies chiefly to the local group of symptoms in efforts to bring about repair; whereas, many of these disorders do not constitute the essential disease, but are merely local expressions of the general neurosis. Attention is called to this point simply to show the importance of investigating the condition of the nerve-centres in young women of school age when advice is sought with reference to menstrual and other disorders of the pelvic organs; for, I asseverate, that it will generally be ascertained that these disturbances take origin in malnutrition of the nerve-centres, which in turn derange the circulation, causing both anemia and hyperemia of the various vital organs. The jaded and worn-out nerves of the overworked and underfed school-girl make a poor foundation for the construction of good blood, and at this period of life poverty of the blood cannot long continue without causing secondary disturbances which must result in serious impairment of the reproductive apparatus.

It appears to be the ambition of many—I had almost said the

majority of—teachers to have their pupils attain a certain point of efficiency within a given period of time, and this without regard to their capacity, physical or mental; and this ambition is too often stimulated by the anxiety of parents or friends. Their capacity and usefulness as teachers is too apt to be measured by the quantity of so-called book knowledge which they can pack into these tender and sensitive brains within a given time, and this without much regard to the quality thereof. Similarly, it was formerly the fashion to estimate the value of the family doctor by the extent of his “ride” and the quantity of medicine he dealt out of his saddle-bags.

To accomplish the end sought, there must necessarily be, in many instances, an overlapping, crowding, and packing edgewise to an extent that is as utterly useless as it is incomprehensible. Then comes the wearing excitement of public examinations, the worry as to class standing, and the bustle and confusion and toil of commencement day. Nerve stimulants are resorted to in order that everything may go well, or at least appear well, during the trying ordeal of the valedictory essay. At last, when all is over and the tension taken off, the poor, weary, worn, and care-tired girl, released from the strain of the never-ending worry of lessons, and tasks, and examinations, sinks down into utter despair of body and soul, unfitted for, and unable to make, any further mental or bodily effort whatever, and either seeks the consulting-room of the much-dreaded yet ever kindly gynecologist, or abandons herself to a semi-helpless, if not hopeless, chronic invalidism.

Another class of these victims of our high-pressure system, with more stamina of constitution than the one just described, passes through all the trials of the recitation-room and the strain of commencement day, coming out of the ordeal apparently unscathed in mental and bodily vigor. Passing out of the school-room into the active world and taking up the ceaseless demands of everyday life, with its home, church, charity, and society duties and obligations, they suddenly learn that they are unable to bear the strain of this toilsome after-work; that the mainsprings of their being have been so weakened by the tension of the schools that they are obliged to retire from the field of usefulness that they had planned for themselves and so eagerly looked forward to, only to drag out a miserable existence in a self-imposed celibacy, revolting alike to the laws of society and of Nature. Or, perhaps, in other instances, they take upon themselves ill-advisedly the duties and responsibilities of

matrimony, only to find—alas! too late—that the trials of maternity are greater than their frail, diseased, or disturbed reproductive organs can withstand; or else, perchance, find themselves cursed with the Upas tree of sterility, which has poisoned forever the atmosphere of their married lives.

Thus, by a somewhat circuitous route, have we reached the climax of this desultory discourse, and now hasten to its conclusion.

Within the narrow limitations of the hour that custom allots to me at this time, I cannot pretend to offer in detail any well-considered remedy for the evils that I have sought to draw attention to anew; but, for myself, I may be permitted to say that I am fully persuaded that four hours a day of study or school work, for girls between the ages of twelve and sixteen years, are quite as many as they can healthfully endure; and, further, that during each catamenial period they should be permitted to forego the recitation-room. Furthermore, mothers should more universally and thoroughly supervise this important week than they do as a rule at present; they should not only insist that their daughters at this time deny themselves of all excessive or consecutive mental and bodily effort, but they should diligently instruct them in the laws of periodicity to which their natures are inevitably tending.

I would have these young girls especially taught the importance of eating good, but plain, wholesome, nutritious food, and, above all, the necessity of eating a hearty breakfast. Too many young women have grown up to regard it as vulgar to indulge the appetite at the morning meal, and have been allowed to cultivate the habit of “mincing” and “sipping” at a few dainty dishes, or have been permitted to go without breakfast altogether. Nothing, in my view, can be more pernicious than this dawdling over the much-needed though oft uneaten breakfast. A recent writer in a work of fiction has so aptly and concisely stated the importance of this matter, that I cannot forego the temptation to quote his words: “There is no better test of a woman’s health than her ability to eat a hearty breakfast, and it might also be said that her physical beauty is in direct proportion to the amount of beefsteak or mutton chops she can put into herself at this meal. Certainly pretty women can eat a hearty breakfast.”

I would, moreover, have the dress of the school-girl so constructed as not to violate the simplest laws of health. The fabric should be warm, and the underwear particularly thick, though soft and fluffy, in climates where the temperature-changes are so sudden and extreme

as this—all to be supported from the shoulders and not allowed to drag from the waist, thus to interfere with the proper development of the abdominal and pelvic organs.

Finally, I would be sure that no girl should enter a boarding-school where the building was more than two stories high, or, indeed, attend any school where she would be compelled to go above the second story to study or recite her lessons. The evils of going up long and steep flights of stairs are manifold, and too well known to require elaboration at my hands.

These, then, compose a few of the errors to be avoided, and evils to be overcome germane to the subject of our discourse. The list might be extended almost indefinitely without exhausting the theme, though it would be sure to exhaust the patience of this audience. It will be fortunate for me if I have not done so already.

For many of the thoughts here grouped, I am indebted to the writings of others. I have not hesitated even to adopt their language in some instances when I have thought my argument was best sustained by so doing, and though I could not stop to give credit in the body of the discourse, I have appended a list of references that will amply serve the purpose.

As a final word, let me say that this subject has not been presented as a novelty, or because of originality in dealing with it; but rather on account of what the writer conceives to be its growing importance in this period of over-work and under-rest; and for the further reason that if any reform is to be wrought in the training and education of girls, it must be done by the coöperation and combined efforts of educators, physicians, and mothers. Fathers, in the very nature of things, are powerless to control the education and training of their daughters. They cannot guide their social career or regulate their general or sexual hygiene. For obvious reasons, custom and propriety have said they shall not be permitted to interfere in these matters, but have committed them all into the hands of mothers. It, therefore, behooves a mother to properly fit herself for the task of bringing up her daughter before she undertakes the responsibilities pertaining to motherhood. A great responsibility, too, devolves upon the family doctor, who must necessarily assume the rôle of chief adviser to the mother in all that pertains to the welfare of her girls. Educators, likewise, must make a study of their work from physical, hygienic, and health standpoints, and particularly enlighten themselves as to the training of girls.

From all this it would appear that mothers, educators, and physicians are not only jointly and severally interested in the problem set forth in this discourse, but I hold that they are in duty bound to coöperate in improving the methods of training girls that now prevail. But of all these I hesitate not to declare that the greatest, most abiding, and weightiest part of the responsibility rests upon the mothers. Hence, to them I would especially commend the subject that I have only imperfectly outlined, and would bespeak its most serious consideration at their hands.

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